

Claims:

1. A method of implementing a pyramid filter bank comprising: first adding a first and a last input signal sample to a sum of input samples of a next lower-tap filter of a current filter to produce a sum of input signal samples for the current filter; and second adding the sum of input signal samples for the current filter to an output signal sample of the next lower-tap filter of the current filter to produce an output signal sample for the current filter.
2. The method of claim 1, wherein the first and second adding is performed by different adders.
3. The method of claim 2, wherein the pyramid filter bank comprises a two-dimensional pyramid filter bank and the first and second adding is applied by column and by row.
4. The method of claim 3, wherein the column and the row adding is performed independently.
5. The method of claim 1, wherein the pyramid filter bank comprises a two-dimensional (2D) pyramid filter bank and the first and second adding is applied by column and by row.
6. The method of claim 5, wherein the first and second adding is

performed progressively.

7. The method of claim 1, wherein the first and second adding is applied by row.
8. The method of claim 1, wherein the first and second adding is applied by column.
9. An article comprising: a storage medium, said storage medium having stored thereon instructions, that, when executed result in: first adding a first and a last input signal sample to a sum of input samples of a next lower-tap filter of a current filter to produce a sum of input signal samples for the current filter; and second adding the sum of input signal samples for the current filter to an output signal sample of the next lower-tap filter of the current filter to produce an output signal sample for the current filter.
10. The article of claim 9, wherein the instructions, when executed, further result in the first and second adding being performed by different adders.
11. The article of claim 10, wherein the instructions, when executed, further result in the current filter comprising a two-dimensional pyramid filter bank and the first and second adding being applied by column and by row.
12. The article of claim 11, wherein the instructions, when executed,

further result in the column and the row adding being performed independently.

13. The article of claim 9, wherein the instructions, when executed, further result in the current filter comprising a two-dimensional (2D) pyramid filter bank and the first and second adding being applied by column and by row.
14. The article of claim 13, wherein the instructions, when executed, further result in the first and second adding being performed progressively.
15. The article of claim 9, wherein the instructions, when executed, further result in the first and second adding being applied by row.
16. The article of claim 9, wherein the instructions, when executed, further result in the first and second adding being applied by column.
17. An integrated circuit comprising:
digital logic circuit components coupled so that, during operation, a first and a last input signal sample are added to a sum of input samples of a next lower-tap filter of a current filter to produce a sum of input signal samples for the current filter and so that the sum of input signal samples for the current filter are added to an output signal sample of the next lower-tap filter of the current filter to produce an output signal sample for the current filter.

18. The integrated circuit of claim 17, wherein the digital logic components include a multiplexer, two flip-flops, a two-input adder and a three-input adder.
19. The integrated circuit of claim 17, wherein, during operation, the current filter comprises a two-dimensional pyramid filter bank and the adding is applied by column and by row.
20. The integrated circuit of claim 19, wherein, during operation, the column and the row adding is performed independently.

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